

# KY Tech News

the electronic magazine for career and technical education  
**November 2007**

## **Filling the Need for Nurses**

Health Sciences programs are paving the way for CTE students to become nurses... and more

## **Getting on Board**

Marketing effort is bringing to light what's happening in today's CTE

## **Plus:**

Good News Flashes  
Did You Know?  
and  
Student Spotlights



# Contents

November 2007

Volume 4

## Quick Tech

Take a brief look at tech ed events happening  
all around the state.....Page 3

## A Message from the Director.....Page 4

## Filling The Need For Nurses

Health Sciences programs are paving the way for  
CTE students to become nurses and more.....Page 7

## Getting On Board

Marketing effort is bringing to light what's happening in  
today's CTE.....Page 10

For electronic-version users, click on the links below  
to read more about KY Tech students, teachers, programs  
and administration.

**Good News Flashes**

<http://www.kytech.ky.gov/marketingclips.htm>

**Did You Know?**

<http://www.kytech.ky.gov/didyouknow.htm>

**Student Spotlights**

<http://www.kytech.ky.gov/kytechstudentspotlight.htm>

# Quick Tech

## **A fast look at career and technical education from around the state and around the country**

### **National Technical Honor Society scholarships awarded**

Breckinridge County ATC student Adam Hicks was recently named as a recipient of the National Technical Honor Society's SkillsUSA scholarship. The award is one of only two given nationally each year, one at the secondary level and one at the postsecondary level. Hicks received the scholarship award at the National SkillsUSA conference in Kansas City, Mo. last summer. NTHS has become America's highest recognition for excellence in career and technical education. Each year the organization teams up with SkillsUSA to promote outstanding student achievement within career and technical education with the \$1,000 scholarships. As part of the application process for the scholarship, Hicks had to submit an essay in which he wrote, "Programs like SkillsUSA and NTHS are ways to showcase and recognize our future American workers, therefore displaying the strength of the future American workforce."

### **Meade Co. ATC takes honors at 2007 state Ford/AAA competition**

After a second place finish last year, the Meade County Area Technology Center's team won this year's state Ford/AAA Auto Skills competition held at the KCTCS Elizabethtown campus. State auto technology students from secondary career and technical centers and programs across the state competed in the hands-on competition after taking written exams to earn a trip to the state finals. Meade County's Korey Medley and Royce Burnett comprised the winning team along with their automotive technology instructor, Donald Dix, Jr.

### **University of Louisville gets \$20.5 million grant for CTE research**

UL has been awarded a \$20.5 million five-year grant to study ways to increase academic achievement and success among CTE students. The university's College of Education and Human Development will fund the National Research Center on Career and Technical Education (NRCCTE.) OCTE is familiar with the group through a collaboration between the agencies to develop the Math-in-CTE program. The goal of the center is to provide research, professional development and technical assistance that will lead to improved technology teaching methods. UL becomes the fourth institution to host the NRCCTE, and James R. Stone III, a nationally known expert on technical education, will serve as director. The center opened Oct. 1.

# **A message from the Office of Career and Technical Education's Executive Director**

***Technical training and academic  
studies open doors.  
Kentucky schools offer diverse  
pathways to success***

As someone who started in Career and Technical Education as a teacher, I wanted my students to be successful, in the classroom, on to college, and into the workforce.

Since those days, I have worn many hats in the CTE world but my focus has never changed. We are only as successful as we make our students.

I have spent the last few months as Executive Director of OCTE listening to students, educators, and parents voice their concerns over how to achieve the highest level of success. I have drawn the conclusion that we must leave behind the cookie-cutter approach of educating our children.

Students have many choices to make along their career paths. We know that most jobs in the future will require some level of postsecondary training. The state's system of universities and community colleges is ready to meet that challenge.



Some students may choose a traditional college education. Others may choose a mixture of a college education and career training and some may go directly to work.

First and foremost, whatever their choice, we need to be sure our students are making the most of their secondary education to ready themselves for college *and* the workforce.

We know that employers look for a broad range of knowledge in perspective employees. Much of that knowledge comes from a student's college years. However, exposing students to a wide variety of programs at the secondary level may prepare them to make better decisions when they choose post-secondary paths. Not all students learn in the same way so it only makes sense that educational systems should offer choices as well.

In our KY Tech system of state-operated schools that include 55 area technology centers - what we used to refer to as vocational schools – students have a wide variety of program areas from which to choose, be it traditional such as welding and carpentry or not-so-traditional programs such as health sciences or information technology. And these are just a few of the many choices CTE students enjoy whether they attend one of the Kentucky Tech schools or one of the many local district career and technology centers.

I would be naïve to think that some still think of CTE centers as nothing more than trade schools, and in many instances, to a certain extent, they are, but is there really anything wrong with that? For instance, there is a significant difference between pipe welding and bead welding; pipe welders are needed in the coal mines of Eastern and Western Kentucky, and bead welders are needed in places like Somerset where the house boat industry is prevalent. Our schools have the ability to get students on the path to go into this in-demand industry, be it old school, trade school, vocational school, whatever you want to call it. We have programs in place to help prepare students for the world of work.

However, over the years we have enhanced or added programs that

better prepare students for a postsecondary career whether in high-tech areas or more traditional ones. We must make students, parents, administrators and counselors aware of the opportunities available in today's CTE. They need to see that auto technicians are using the computer along with the wrench and that carpentry closely resembles geometry.

The correlation between technical education, postsecondary education and economic development is evident. Not only are students in the career and technology centers getting an education, they are beginning careers. Most are earning college credit through a dual credit curriculum based largely on that of the Kentucky Community and Technical College System.

As today's educational and employment needs have advanced, the programs at technology centers have advanced to keep pace with those needs. CTE instructors are teaching students to build Web sites and computer networks; they are teaching them skills for health related occupations such as nursing; and yes, they still are teaching them how to become auto mechanics, electricians, carpenters and welders. Along the way, the technology centers integrate math, science, English in an applied technology setting.



Through projects like the Math-in CTE program, Relevant Instruction and Geometry-in-Carpentry, we are bringing CTE instructors together with academic classroom instructors so they can develop a course of study that speaks the same language, allowing students to see the similarities in their technical programs and math classes and to apply their increased knowledge to both.

KY Tech also has earned the coveted Southern Association of Colleges and Schools (SACS) accreditation - the first technical education system of schools in the country to earn such a distinction.

According to the U.S. Department of Labor's Bureau of Labor Statistics, between 2004 and 2014, among all occupations in the economy, computer and healthcare occupations are expected to grow the fastest. The vast majority of our career and tech centers have programs in place to help prepare students to fill these jobs.

The bottom line is this; our schools are preparing students for postsecondary education, they are also teaching trades and building careers. It truly is a meeting of tradition and technology.

It is critical to have well trained doctors, engineers and business professionals, as well as carpenters, plumbers, welders and auto technicians.

Our schools in Kentucky, both at secondary and post-secondary levels, cover all these areas.

This administration has worked diligently to promote educational pathways for all students at all levels.

The administration's merging of the Education Cabinet and the Cabinet for Workforce Development has opened new pathways for the citizens of the Commonwealth. We must help students explore the diverse opportunities our schools offer so that each finds the best pathway to his or her future.

***John Marks***



# FILLING THE NEED FOR NURSES

The need for qualified health care professionals is increasing, with projected employment by the year 2014 to be more than 270,000 in this state alone, but fulfilling that need is another matter.

The state's Career and Technical Education (CTE) centers, Area Technology Centers (ATC) and high schools are countering that need by offering secondary health sciences programs designed to give students a head start on a variety of health care occupations.

There are nearly 100 such health sciences, Allied Health (AH) and pre-nursing programs in Kentucky, serving over 9,000 students. A number of those students, such as the ones enrolled in the AH programs, are earning college credit and obtaining required college entrance qualifications.

Four former CTE students from the Hughes Jones Harrodsburg ATC who took advantage of the health programs, completed their secondary and pre-college courses in 2007 and are now making their way into the postsecondary level.

## HEALTH SCIENCES PROGRAMS ARE PAVING THE WAY FOR CTE STUDENTS TO BECOME NURSES... AND MORE



Brooke Peak readies equipment for an outpatient surgical procedure.

Those students also gained valuable experience through a cooperative learning program while at the ATC and summer employment at a local medical center.

Brooke Peak, Mollie Duncan, Brandi Flood and Lauren Heustis entered their health sciences program for different reasons but with the same goal in mind, to become health care professionals.

The four worked at the Ephraim McDowell Regional Medical Center in Danville, first as co-op students while finishing high school, then during the summer as student employees. The experience, coupled with their classes, paved the way as they entered their first semester of college.



Peak became interested when her grandfather was diagnosed with cancer.

"I saw a lot of what the nurses and doctors did to help him while he was sick and decided I wanted to do that myself," she said. "I helped with his care at home and stayed with him until he passed away."

Heustis became involved in the program after her mother was involved in a serious automobile accident.

"She was in the hospital for three weeks and I stayed with her and watched how the nurses cared for her. I knew then that was what I wanted to do," said Heustis.

Duncan and Flood were introduced into the program in a different way.

"I became interested because a friend of mine was in the program. After my first year, I was hooked," said Duncan. "The most important thing I have learned is to put others before myself because there are a lot of people that are sick and need help."

Flood always had an interest in the medical field and came to the ATC to fulfill her interests.

"It's just something I was always interested in," she said. "I wanted to do something in the surgical field and that is where the hospital placed me."

As a matter of fact, all four students were engaged in high tech areas of the hospital, with three of the four working in some capacity assisting surgical teams and Duncan working in the heart catheterization lab.





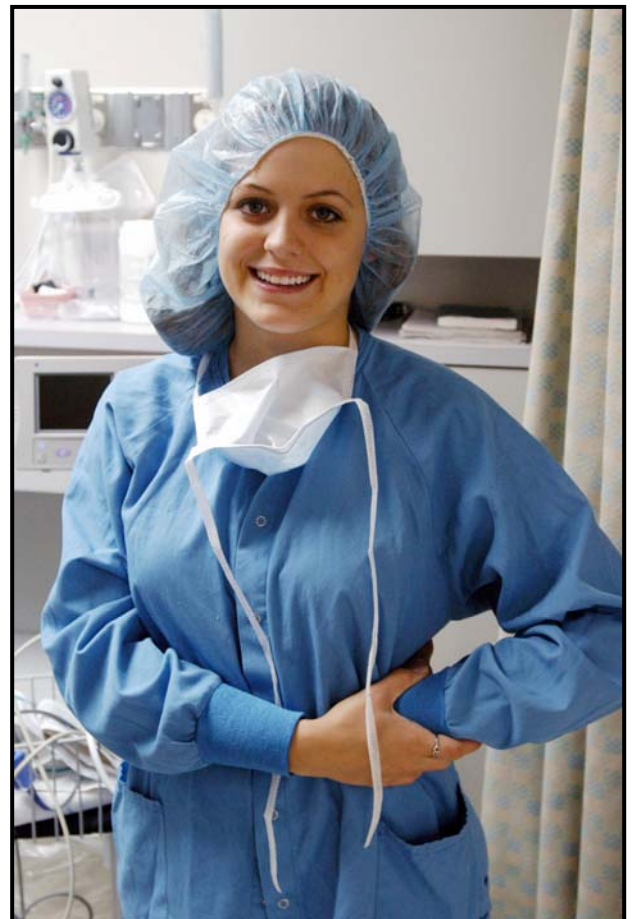
**Brandi Flood checks a patient's vital signs.**

"You can't miss anything when you're working with a patient's life," said Flood. "We have to have a lot of knowledge about our patients; we are being advocates for them."

Duncan said, "Vocational school used to be considered a place for students that weren't planning on going to college. It's not that way now. This program has indeed prepared me for college."

Heustis said, "It has prepared me for what I really want to do, and there are so many things to choose from in the medical field."

Peak said, "I can't picture myself doing anything else."



Susan Readnower, their instructor at the ATC, said these students are exceptional people doing exceptional things, especially at their age.

"These students are learning things now that weren't offered a few years ago, but healthcare is so different now. It's so important to be well educated and trained in this field with all the new technology, and these girls are so advanced at this point. They were not your typical high school students. They are laying the foundation for their future," said Redenower.

While the four also performed more traditional nursing roles at the hospital, they learned far more than how to take temperatures and blood pressures.

# Getting on Board

## Marketing effort is bringing to light what's happening in today's CTE

The choices are many for high school students when it comes to the right elective classes to take mixed with the required classes they need in order to graduate. Luckily their teachers, administrators, parents and especially their guidance counselors can all play a role in helping them make the best decisions.

With that in mind, the Office of Career and Technical Education (OCTE) has embarked upon a grass roots way of helping with those decisions through each of its 55 area technology centers (ATC.)

Some high schools across the state already have had a taste of the marketing effort through a video and poster project developed in 2006 to place emphasis on students in non-traditional career and technical education (CTE) program areas such as male students involved in programs like health sciences and females enrolled in auto tech and welding classes.

Currently the Education Cabinet's Office of Communication that provides public relations for OCTE, is developing a series of student success stories from each ATC along with new posters and printed materials designed to show some of the advantages of being a CTE student. The material also will assist teachers, administrators,

parents and guidance counselors in making informed decisions when it comes to CTE.

Not every student is suited for or wants to participate in technical education programs, but thousands of those in ATCs and career and tech centers across the state have discovered a wealth of possibilities in finding that technical education is more today than just traditional vocational training.





The initiative has received support from the Communication Office as they spread the word about CTE and what it can mean to a student's educational endeavors as well their future in the workplace.

"Many folks outside the realm of Career and Technical Education aren't really sure about what we do, what we offer and how advanced technical education has become," said John Marks, OCTE executive director. "We have tried to work toward changing perceptions of our schools and our students and in some cases we've made advances in doing this, but there still is a mountain to climb. Well, we have our mountain climbing shoes on and we've started creating marketing items that hopefully will turn that mountain into a mole hill."

### **Lauren Heustis looks over a lesson in class.**



Dr. Joyce Wogoman, curriculum director for OCTE, said the old-school idea that vocational training is more manual labor than critical thinking is just that, old-school.

"There are many that still have the belief that if students can work with their hands they can be successful in our programs. This has almost become a thing of the past. Most of our programs take a tremendous amount of math and science skills," she said.

Wogoman also said CTE can give students a preview into a career choice before they commit to a degree or finish any postsecondary training.

"Almost every student will eventually have to go to work and if they have been in a CTE course they can relate some of those experiences to their career choice," she said. "I think CTE can benefit any student by helping them make better career decisions. How many times has

someone gone to college, gotten a degree, gone into the workforce only to discover that they hate their job? In many cases this is because they were never exposed to what the job really entailed; they just went to school. They were never allowed to experience the career first hand."

Many CTE programs work as preparatory for postsecondary education and/or training. Through dual credit and articulation programs, students have a head start on their next educational steps.

Pat Goetz, a guidance counselor in the Kenton County school district located at J.D. Patton ATC, sees on a daily basis that many CTE students are planning some type of postsecondary endeavors.

“One of the most challenging tasks of Tech Centers is to change the perception of CTE programs and college bound students. The best way to counteract this is with facts,” said Goetz. “Sixty-eight percent of our seniors made plans last year to attend either a two-year college, four-year college or join the military. The dual credit program gives our students a college transcript with anywhere from five to 14 college credits. This shows that we are already doing college level work and expect our students to continue down that path.”

Goetz also reiterated the idea that CTE students get a glimpse into careers other students may not get the opportunity to experience.

“Recently I was talking with one of our seniors at J.D. Patton. He told me that even if it’s not what you want to do your whole life, it gives you an idea of what it’s like to have a career. It opens up a lot of different fields. He told me that being at Patton has helped him focus on his future,” she said. “Technical schools provide students with immediate, real world

applications and a springboard for careers.”

While CTE has changed over the years, perceptions haven’t been as progressive, but informing students, parents and other educators can bring about that needed change and create more options for all students.

“There has been a steady evolution in technical education in recent decades,” said Goetz. “Years ago V-school meant trade school and it was intended for students who were going directly from high school to the work force. That is changing. Today, higher levels of thinking are encouraged; our students are learning complex principles and theories which are the foundation of their skills. When talking with students it is helpful to convey the message that our courses are elective classes and can be used to increase choices, helping them discover personal strengths while learning a practical skill which can be used in everyday life. Some of our students use the skills they have learned to work their way through college.”





KY Tech News is produced by the Kentucky Education Cabinet in conjunction with the Department for Workforce Investment's Office of Career and Technical Education.

OCTE is an agency of the Education Cabinet's Department for Workforce Investment. OCTE administers 55 area technology centers, which are secondary schools that offer students hands-on training in business, communications, construction, manufacturing, transportation and information technology fields and health and human services.

The Kentucky Education Cabinet coordinates learning programs from P-16 and manages and supports training and employment functions in the Department for Workforce Investment.

For more information about our programs, visit [www.educationcabinet.ky.gov](http://www.educationcabinet.ky.gov) or [www.workforce.ky.gov](http://www.workforce.ky.gov), or call 502-564-6606, ext. 177.

